

Work Order ID 112472

February-13-14 12:54:10 PM

112472

Page 1

Item ID: D3414-041

Accept

N900040100

Setup Start

NS1

Revision ID:

D 3 4 1 4 - 0 4 1
B 4 1 2 4 7 2

Stop

NS2

Item Name: Lug

Start Date: 30/01/2014 Start Qty: 40.00

40

Cust Item ID:

Required Date: 30/01/2014 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals:

Process Plan: *[Signature]*

Date: 14-02-13 Tooling:

Date:

Run Start

NR1

QC:

Date: SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3414	Rev C

100

0.00

100

Waterjet

Memo

0.00

WJ 2/18/14

FLOW CNC Waterjet

1-Cut as per Dwg D3414-1

Dwg Rev:

Prog Rev:

ISSUE PO *Po 23011*

POSSIBLE SUPPLIER: LOEBSACK WATERJET

105

Receive & Inspect for Damage & Mat'l Certs

0.00

105

Packaging

Memo

0.00

Packaging

FEB 19 (40)

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____		Work Order Update <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
					Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
					Large Fab <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other						

Work Order ID 112472

February-13-14 12:54:10 PM

112472

Page 2

Item ID: D3414-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Lug

Stop

NS2

Start Date: 30/01/2014 Start Qty: 40.00

40

Cust Item ID:

Required Date: 30/01/2014 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
115 *115* QC	QC6- Inspect dimensions to drawing	0.00	37 9-19	MIS/B		40			

Quality Control

125

125

Small Fab

Small Fab

Memo

0.00

DAS
30
9-89

Mfr 40

14/05/14

130

130

Brake NC

Brake NC

Memo

0.00

DAS
30
9-89

40

14/05/14

1-Deburr

2-Form using DT8254 as per Dwg D3414

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS										
Part No. _____		Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>						
NCR No. _____		Work Order Update <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>						
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data <input type="checkbox"/>	Equip/Tooling <input type="checkbox"/>	Operator <input type="checkbox"/>	Material <input type="checkbox"/>	Setup <input type="checkbox"/>	Other <input type="checkbox"/>	Process <input type="checkbox"/>	Supplier <input type="checkbox"/>	Training <input type="checkbox"/>	Unapproved <input type="checkbox"/>						
FAULT CATEGORY															
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube					General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	

Work Order ID 112472

February-13-14 12:54:10 PM

112472

Page 3

Item ID: D3414-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Lug

Stop

NS2

Start Date: 30/01/2014 Start Qty: 40.00

40

Cust Item ID:

Required Date: 30/01/2014 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID
140

Operation
Description

Set Up/
Run Hours
0.00

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

Large Fab

Memo

0.00

40

14-06-05

Large Fab

1- Weld using location Jig DT9625 as per Dwg D3414
A/R S.S. welding rod Batch: M126854

MSL

150

QC9- Inspect visual per QSI004- Fusion Welds

0.00

(31)

14-06-09

DAS

9

9-09

150

QC

Quality Control

Memo

0.00

(PTO →)

160

QC5- Inspect part completeness to step on W/O

0.00

(31)

14-06-09

DAS

9

9-09

160

QC

Quality Control

Memo

0.00

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order:	112472				DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No.	D3414-041				Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input checked="" type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No.											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data	14/06/09	140	89	Parts was welded to hot, had undercut, bad where	DAS 16 9-09 Q2042	scrap + destroy Qty x 9 D3414-041	14/06/09 ML	DAS 9 9-09 14-06-09	DAS 16 9-09 14/06/12		
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input checked="" type="checkbox"/> Other <u>under cuts / weld too hot</u>							
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input checked="" type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled							

Work Order ID 112472

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112472

Page 4

Item ID: D3414-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Lug

Stop

NS2

Start Date: 30/01/2014 Start Qty: 40.00

40

Cust Item ID:

Required Date: 30/01/2014 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

170

170

Powdercoat

Powder Coating

Operation
Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

M 128027

31 6 446-12.

DAS

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

11:15
100
11:15

DAS
27
9-89
M 16/12

180

180

QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

31

190

190

Packaging

Packaging

Identify as per dwg & Stock Location: ST

0.00

Memo

0.00

31X

DAS
28
9-89

JUN 16 2014

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS										
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other								
Part No. _____ NCR No. _____															
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector						
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process															
Supplier															
Training															
Unapproved															
FAULT CATEGORY															
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled			
														<input type="checkbox"/> Other.	

Work Order ID 112472

112472

Page 5

February-13-14 12:54:10 PM

Item ID: D3414-041 Accept *N900040100* Setup Start *NS1*
Revision ID:
Item Name: Lug Stop *NS2*
Start Date: 30/01/2014 Start Qty: 40.00 *40* Cust Item ID:
Required Date: 30/01/2014 Req'd Qty: 40.00 *40* Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*
_____ 14/6/17 JJ

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200 *200* QC	QC21- Final Inspection - Work Order Release Quality Control	0.00							
	Memo	0.00							

ATM616

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS										
Part No. _____		Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>						
NCR No. _____		Work Order Update <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>						
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data <input type="checkbox"/>	Equip/Tooling <input type="checkbox"/>	Operator <input type="checkbox"/>	Material <input type="checkbox"/>	Setup <input type="checkbox"/>	Other <input type="checkbox"/>	Process <input type="checkbox"/>	Supplier <input type="checkbox"/>	Training <input type="checkbox"/>	Unapproved <input type="checkbox"/>						
FAULT CATEGORY															
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio				<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
														<input type="checkbox"/> Other	

Picklist Print

February-13-14 12:56:53 PM

Page 1

Work Order ID: 112472

Parent Item: D3414-041

Parent Item Name: Lug

112472
D3414-041

Start Date: 30/01/2014

Required Date: 30/01/2014

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP A05.09.13 New issue KJ/JLM

D3414-1 F

x40

CL14/104/16

14-06-03 pbc

NCR: Yes / No

DQA: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	General			Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>				
Centre Not Concentric to O/S				BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>				
Cracks				Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>				
Crushed/Crimped.				Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>				
Cuffs				Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>					
Heat Treat				Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>					
Inspection Strip in Tube				Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>				
Ripples in Bend				Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>						
Torque Waves in Extrusion				Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>						
Turning Sequence				Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>						
Wave/Twist in Tube				Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>						

DART AEROSPACE LTD	Work Order:	112472
Description: Lug Bracket	Part Number:	D3414-1
Inspection Dwg: D3414	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article X Prototype

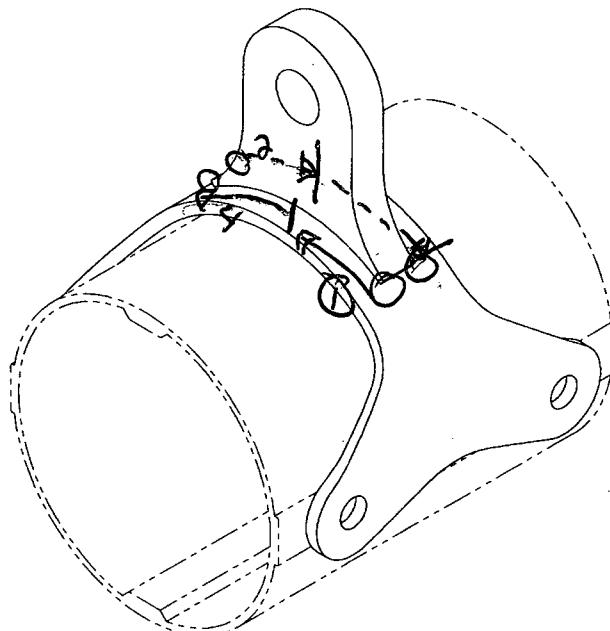
DAS

Measured by:	mm	Audited by:	27 9.89	Prototype Approval:	N/A
Date:	14/05/13	Date:	14/5/13	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue P/O D3414-041	KJ/DD	
B	09.05.27	Dimensions updated per Dwg Rev B	KJ	
C	09.10.16	Dwg Rev updated to Rev C	KJ	<i>[Signature]</i> <i>[Signature]</i>

8 7 6 5 4 3 2 1

ITEM No.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D3414-041	LUG ASSEMBLY
2	1	D3414-1	LUG BRACKET
3	1	D3414-3	LUG

**D3414-041 LUG ASSEMBLY****NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3414-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.52 lbs

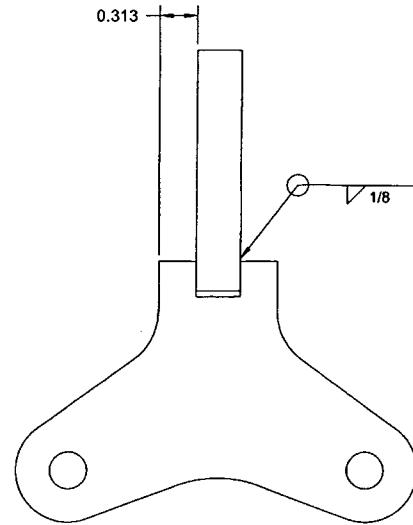
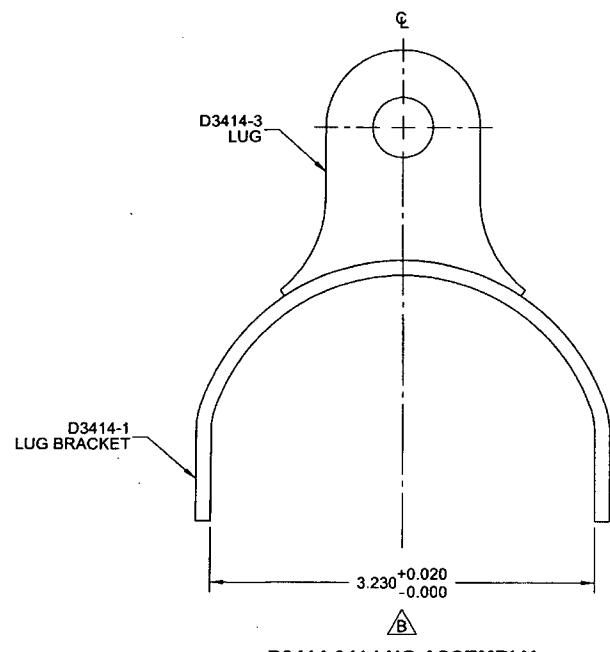
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 112472 ML3
14-01-31

RELEASED
0106/06/14

C	BREAK SHARP EDGES FOR -3 NOW 0.030-0.060 WAS 0.010-0.030 (ZN A7-3)	CP	09.06.17
B	DRAWING REDRAWN IN SOLIDWORKS WITH CURRENT STANDARDS AND TRANSFERRED TO "B" SIZE BORDER. FLAT PATTERN FOR -1 INCREASED IN LENGTH TO PREVENT FOULING AT INSTL (SEE PAR198). FLAT SPOTS REMOVED FROM -1 (PART NOW "U" SHAPED) FOR EASE OF MANUFACTURE. B7-3 ADDED TOLERANCE TO 3.230 DIM. C2-3 1.12 DIM WAS 1.20.	AJS	08.09.23
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD	
DRAWN	CP	HAWKSLEY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3414	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		LUG ASSEMBLY	NTS
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8 7 6 5 4 3 2 1



RELEASED
09/06/17

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DESIGN	CP	DART AEROSPACE LTD	
DRAWN	CR	HAWKESBURY, ONTARIO, CANADA	
CHECKED	GD	DRAWING NO. D3414	
MFG. APPR.	IN	REV. C	SHEET 2 OF 3
APPROVED	NF	TITLE	SCALE
DE APPR.	NF	LUG ASSEMBLY	NTS
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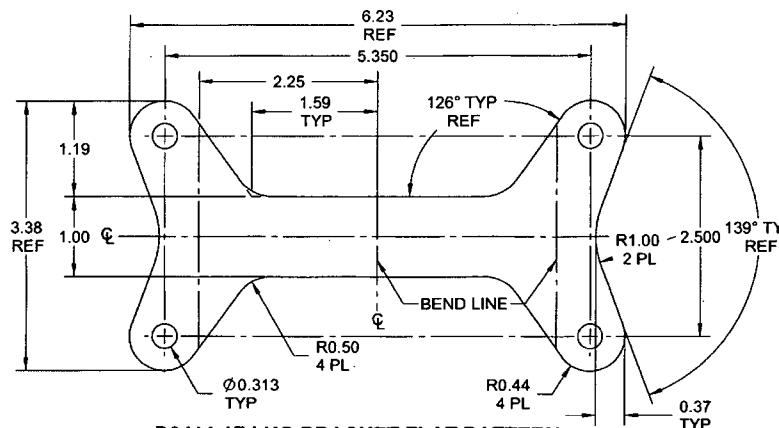
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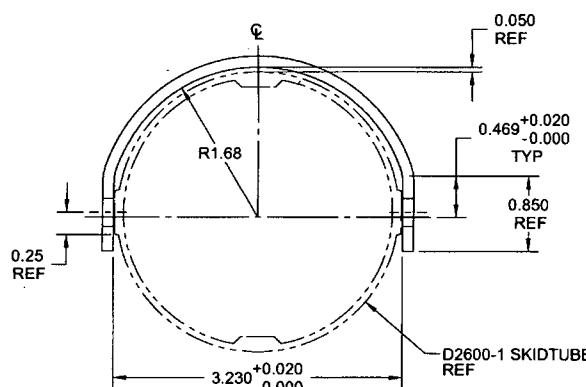
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D3414-1F LUG BRACKET FLAT PATTERN



D3414-1 LUG BRACKET

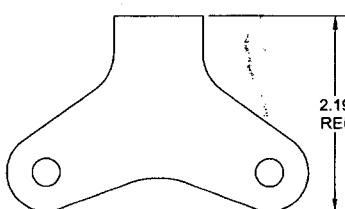
NOTES:

1) MATERIAL: -1: AISI 304/316 STAINLESS STEEL SHEET, 12 GAUGE (0.100 THICK)
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524
REF. DART SPEC. M304S12GA

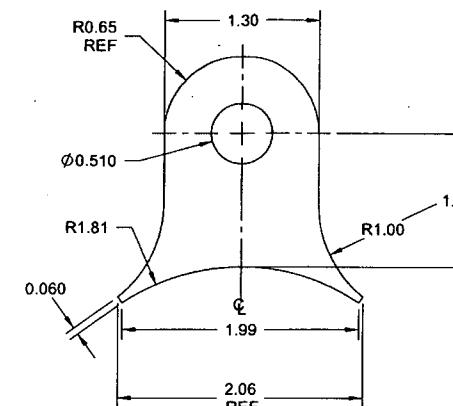
-3: AISI 304/316 STAINLESS STEEL PLATE
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524
REF. DART SPEC. M304S

2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: -1: 0.010 TO 0.020 MAX
-3: 0.030 TO 0.060 MAX

6) IDENTIFICATION: N/A
7) WEIGHT: N/A



SIDE VIEW FOR REF ONLY



D3414-3 LUG

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09/06/06 AM

DESIGN	QP	DART AEROSPACE LTD
DRAWN	CP	HAWKESBURY, ONTARIO, CANADA
CHECKED		REV. C
MFG. APPR.		SHEET 3 OF 3
APPROVED		
DE APPR.		TITLE
		SCALE
		NTS
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO23011

Purchase Order Date 2/14/2014

PO Print Date 2/14/2014

Page Number 1 of 9

Order From : VC-LWC001

LOEBSACK WATERJET CANADA LTD.
55 NORTHFIELD DR. E.
P.O.BOX 339

WATERLOO, ONTARIO N2K 3T6

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Buyer Michael Gregoire

Vendor Phone

Customer POID

Ship To Contact

Customer Tax # 10127-2607

Ship To Phone

Terms Net 30

Ship Via: FedEx PI collect

Currency CAD

Ship Acct:

FOB FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD Promise Date	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
2	D3414-1F	Lug Bracket-Flat	3/28/2014 Yes	3/28/2014	40.00 Each	\$8.20	\$328.00
Manufacture as per drawing D3414-1 rev.c B112472							
3	D2438P	Clamp	3/28/2014 Yes	3/28/2014	150.00 Each	\$2.75	\$412.50
Manufacture as per drawing D2438 rev c B112483							
4	D2804-2P	Bracket	3/28/2014 Yes	3/28/2014	12.00 Each	\$62.60	\$751.20
Manufacture as per drawing D2804 rev.c B111571							

PO Instructions: PROCUREMENT QUALITY CLAUSES

A005 RIGHT OF ENTRY

A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A042 DART NOTIFICATION BY SUPPLIER



55 Northfield Dr., E., Box 339
Waterloo, On. N2K 3T6
(519)570-6590
F. (519)893-4252

Certificate of Compliance

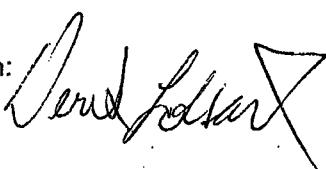
Sold To: DART Aerospace

Purchase Order Nu ID PO23011

Item	Quantity	Part Number	Revision	Description	Mtl. / Thk.	HT Number
6(19)	12	D2803-1	b	BRACKET	6061-T6 / 0.50"	11/12/168D0
23(20)	12	D2803-2	b	BRACKET	6061-T6 / 0.50"	11/12/168D0
5(18)	12	D2804-1	c	BRACKET	6061-T6 / 0.50"	11/12/168D0
4(17)	12	D2804-2	c	BRACKET	6061-T6 / 0.50"	11/12/168D0
10(9)	10	D4093-3	d	BRACKET	6061-T6 / 0.750"	22/11/036D6
20(6)	30	D3065-5	b	STEP LEG	5052-H32 / 0.080"	3C529#2
24(24)	24	D2561P	b	LUG	6061T6 / 0.25"	08/11/010D6
3(18)	150	D2838	c	CLAMP	304 SS / 0.063"	A1303988
17(16)	60	D2519	d	CLAMP	304 SS / 0.063"	A1303988
2(17)	40	D3414-1F	c	CLAMP	304 SS / 0.100"	500400
15(14)	60	D4149-1	c	CROSSTUBE LUG	304 SS / 0.120"	350420
12(11)	40	D4150-3	b	ARM PLATE	304 SS / 0.120"	350420
13(12)	40	D4151-1	c	L HARDPOINT PL	304 SS / 0.120"	350420
14(13)	40	D4515-3	c	U HARDPOINT PL	304 SS / 0.120"	350420
16(15)	40	D4148-1	c	CROSSTUBE LUG	304 SS / 0.120"	350420

This is to certify that the whole of the supplies detailed hereon has been inspected, tested, packed, and unless otherwise stated, conform in all respects with the requirements of the contract or order.

Name: Derek Loebssack Title: President

Sign:  Dated: 05-01-14

304-2B SST 0.105

FEB. 28, 2014 3:46PM MATERIAL

HT# 500400

NO. 8465 P. 3

THYSSENKRUPP MATERIALS N.A.

DRAFTED

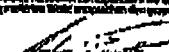
Project
We certify that this is a true copy of the report furnished by the producer of the metal, or datum resulting from tests made in approved labs.

100

Certificate of Mill Test Results

BL PEC-00000-000

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Manufacturer / Fabricant / Hersteller		Type of document / Type de document / Art des Dokumentes	INSPECTION CERTIFICATE		Document number / N° de document / Referenz-Nr. 0000048212 /
outokumpu		CERTIFICADO DE INSPECION ABRAHMEINPROZESS according to / de acuerdo con / nach EN 302/94-3.1		Page / Página / Seite: 1 / 1	
1 Messeney Group Drive, P.O. Box 13000; Calver, AL 30513-1300 GILBERT METAL SALES LIMITED 280 DENRY ROAD EAST SUITE 305 MISSISSAUGA, ON, L3T 2J6 CANADA		Customer/Client/Client / N° de Pedido Claro / Kunde/Kunde: GILBERT METAL SALES LIMITED, MISSISSAUGA Customer's order number / N° de Pedido Cliente / Kunden-Nr. TG-1883			
Product / Product / Material: SHEET/THINAS/BLICK		Manufacture date / Date de Fabrication / Werkstatt-Datum: 2011-06-08 / 008			
Standard of delivery / Condiciones de entrega / Lieferbedingungen ASTM A248/A248M, ASME SA-248 Sec.II Part A Ed.2010 ASTM A410/A410M, ASME SA-410 Sec.II Part A Ed.2010		Delivery date / N° de Entrega / Liefertermine Nr. 05/24/2012 / 020			
Customer's material no./ N° de material del cliente/ Kundenmaterial-Nr.:		Product dimensions (Thickness / Width / Length) / Dimensions Produit / Ancho / Largo / Produkt-dimensions-Groesse / Breite / Länge		Customer's procedure/ Procedimiento cliente / Kunden-Verfahren / TYPE 304LJ304	
Product weight / Peso del producto / Produkt-Gewicht: 2.87 mm x 1,819-20 mm x 2,430-40 mm 0.1050 Inch x 48.0000 Inch x 66.5000 Inch				Customer's procedure/ Procedimiento cliente / Kunden-Verfahren / AOD	
Factory No./ Número de fábrica / Fabrik-Nr.:		Part No./ Número de pieza / Teile-Nr.:		Customer's procedure/ Procedimiento cliente / Kunden-Verfahren / 1000105991	
5072036		25		500400	
5072030		25		500400	
5072051		25		500400	
Sum / Suma / Summe:		75		1000105991	
Weight / Peso / Gewicht		Actual weight / Peso real / Gewicht-		Sample M# / Nº de muestra / Prob-Nr.:	
500400		9,865 lb / 4,475 kg			
Country of origin / País de origen / Herstellungsland:		Chemical composition / Composición Química / Chemische Zusammensetzung:			
USA		% Cr % Mn % P % S % Ni % Mo % N % Cu			
Sample Position/ Localización de muestra/ Prob-Stellung:		TRANSVERSE			
Inspection test/ Prueba de inspección/ Prüfungstest:		VGO-2% PSI / MPa		EL. A2⁺ %	
1000105990		44,870 / 300		55.0	
1000105991		43,666 / 300		55.2	
Chemical analysis / Análisis químico / Qualitative Analyse:				OK	
Heat / Heat number / Número de hornos / Welle-Nr.:				OK	
HEAT - TREATMENT: 1920°C/AIR					
No weld repairs					
No intentional additions of Mercury compounds were made or used					
Few of radioactive contamination					
EU RoHS Directive 2011/65/EU Compliant					
Product manufactured in the USA					
Country of heat as per ISO 31.05-1					
Guarantor of the document / Declarante del documento / Ausstatter des Dokumentes					
The information provided is a true copy of Order and the information contained can be relied upon in the preparation of quotations and contracts and other purposes.					
					
Andrew Faustini Phone: +1 261 820 9482					
Date of export / Fecha de embarque / Datum des Exportes: 05/17/2013					